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APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE CONFIRMATION NO. 57941.000025 1169 10/662,872 09/16/2003 Vladimir M. Stojanovic 7590 **EXAMINER** 38013 04/05/2006 HUNTON & WILLIAMS LLP/RAMBUS INC. ODOM, CURTIS B INTELLECTUAL PROPERTY DEPARTMENT ART UNIT PAPER NUMBER 1900 K STREET, N.W. **SUITE 1200** 2611 WASHINGTON, DC 20006-1109 DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/662,872	STOJANOVIC ET AL.
	Examiner	Art Unit
	Curtis B. Odom	2634
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 16 September 2003.		
2a) This action is FINAL . 2b) This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-171</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6) Claim(s) is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) 1-171 are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
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Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te atent Application (PTO-152)
C. Datast and Trademody Office		· · —

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - 1. Claims 1-88, 106-109, 142-147, drawn to an equalizer, classified in class 375, subclass 229.
 - Claims 89-105, 110-141, drawn to data clock recovery, classified in class 375, subclass 371.
 - III. Claims 148-171, drawn to a receiver including differential amplifiers, classified in class 375, subclass 318.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions I, II, and III are directed to related operations in a receiver. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, Invention I refers to an equalizer in a receiver which generates samples on an input signal based on a threshold value and selects one of the samples to be used to generate an equalization signal. Invention II refers to a data clock recovery circuit which adjusts the phase of a clock signal according to the state of a sample of the input data signal. Invention III refers to a differential amplifier receiver including a plurality of differential amplifiers and resistive elements which draw currents through the resistive elements according to signal levels of the input signal.

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Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the 3. examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Curtis Odom March 31, 2006

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JAY K. PATEL SUPERVISORY PATENT EXAMINER